

**Listing of Claims:**

This listing of claims will replace all prior versions, and listing, of claims in the application.

Claims 1-23 (canceled).

Claim 24 (withdrawn): A method of diagnosis for neuropathy comprising contacting a sample to be tested with a receptor protein capable of binding a PACAP protein and measuring the amount of PACAP binding to the receptor protein.

Claim 25 (withdrawn): The method of diagnosis of claim 24, wherein the receptor protein is a receptor fragment as claimed in claim 7.

Claim 26 (withdrawn): The method as claimed in claim 24 wherein a decrease in PACAP concentration is an indication of the presence of Alzheimer's disease.

Claims 27-36 (canceled).

Claim 37 (withdrawn): A compound or a salt thereof obtained by the method as claimed in claim 31.

Claim 38 (withdrawn): The compound or a salt thereof as claimed in claim 37 which is a compound activating PACAP receptor or a compound antagonizing binding of a PACAP to a PACAP receptor.

Claim 39. (currently amended) A pharmaceutical composition for neuropathy comprising an effective amount of the compound or the salt thereof ~~as claimed in claim 37~~ obtained by determining

(i) an effect of a test compound on PACAP receptor activity comprising comparing PACAP receptor activities in cases of (a) and (b);

(a) contacting PACAP receptor with a PACAP;

(b) contacting PACAP receptor with a PACAP and a test compound, or

(ii) an effect of a test compound on binding of PACAP to PACAP receptor comprising comparing an amount of binding of PACAP to PACAP receptor in cases of (a) and (b);

(a) contacting PACAP receptor with a PACAP;

(b) contacting PACAP receptor with a PACAP and a test compound.

Claim 40 (withdrawn): The pharmaceutical composition of claim 39, wherein the neuropathy is Alzheimer's disease.

Claims 41-43 (canceled).

Claim 44 (withdrawn): A signal peptide selected from the group of peptides consisting of a peptide which has 1<sup>st</sup> to 37<sup>th</sup> amino acid sequence of SEQ ID NO: 15, a peptide which has 1<sup>st</sup> to 37<sup>th</sup> amino acid sequence of SEQ ID NO: 17, a peptide which has 1<sup>st</sup> to 19<sup>th</sup> amino acid sequence of SEQ ID NO: 19, a peptide which has 1<sup>st</sup> to 19<sup>th</sup> amino acid of SEQ ID NO: 21, a peptide which has 1<sup>st</sup> to 77<sup>th</sup> amino acid sequence of SEQ ID NO: 23, a peptide which has 1<sup>st</sup> to 77<sup>th</sup> amino acid sequence of SEQ ID NO: 25, a peptide which has 1<sup>st</sup> to 77<sup>th</sup> amino acid sequence of SEQ ID NO: 29, a peptide which has 58<sup>th</sup> to 77<sup>th</sup> amino acid sequence of SEQ ID NO: 23, a peptide which has 58<sup>th</sup> to 77<sup>th</sup> amino acid sequence of SEQ ID NO: 25, a peptide which has 58<sup>th</sup> to 77<sup>th</sup> amino acid sequence of SEQ ID NO: 27 and a peptide which has 58<sup>th</sup> to 77<sup>th</sup> amino acid sequence of SEQ ID NO: 29; or a salt thereof.

Claim 45 (withdrawn): A DNA which codes for a peptide as claimed in claim 44.

Claim 46 (withdrawn): A DNA as claimed in claim 45 which is selected from the group consisting of a DNA which has 1<sup>st</sup> to 111<sup>th</sup> nucleotide sequence of SEQ ID NO: 30, a DNA which has 1<sup>st</sup> to 111<sup>th</sup> nucleotide sequence of SEQ ID NO: 31, a DNA which has

1<sup>st</sup> to 57<sup>th</sup> nucleotide sequence of SEQ ID NO: 32, a DNA which has 1<sup>st</sup> to 57<sup>th</sup> nucleotide sequence of SEQ ID NO: 33, a DNA which has 1<sup>st</sup> to 231<sup>st</sup> nucleotide sequence of SEQ ID NO: 35, a DNA which has 1<sup>st</sup> to 231<sup>st</sup> nucleotide sequence of SEQ ID NO: 37, a DNA which has 172<sup>nd</sup> to 231<sup>st</sup> nucleotide sequence of SEQ ID NO: 34, a DNA which has 172<sup>nd</sup> to 231<sup>st</sup> nucleotide sequence of SEQ ID NO: 35, a DNA which has 172<sup>nd</sup> to 231<sup>st</sup> nucleotide sequence of SEQ ID NO: 36 and a DNA which has 172<sup>nd</sup> to 231<sup>st</sup> nucleotide sequence of SEQ ID NO: 37.

Claims 47-50 (canceled).

Claim 51 (previously presented). A pharmaceutical composition for neuropathy comprising an effective amount of a compound or a salt thereof which activates a PACAP receptor or antagonizes binding of PACAP to a PACAP receptor.

Claim 52 (previously presented). A pharmaceutical composition for neuropathy comprising an effective amount of PACAP agonists.

Claim 53 (previously presented). A pharmaceutical composition for Alzheimer's disease comprising an effective amount of PACAP agonists.

Claim 54 (withdrawn). A method for treating neuropathy which comprises administering an effective amount of compounds or a salt thereof which activates a PACAP receptor or antagonizes binding of a PACAP to a PACAP receptor to mammals.

Claim 55 (withdrawn). A method for treating neuropathy which comprises administering an effective amount of PACAP agonists to mammals.

Claim 56 (withdrawn). A method for treating Alzheimer's disease which comprises administering an effective amount of PACAP agonists to mammals.

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